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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,260	07/30/2001	Pau Soler	60004608Z141	4064

22879 7590 01/25/2006

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EXAMINER

BAKER, CHARLOTTE M

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental
Notice of Allowability**

Application No.

09/919,260

Examiner

Charlotte M. Baker

Applicant(s)

SOLER ET AL.

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment after notice of allowance filed on 01/03/2006.
2. ☒ The allowed claim(s) is/are 1-40.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

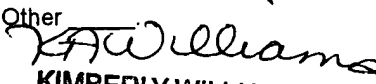
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
- Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
- ☐ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Response to Amendment

1. The amendment filed on January 03, 2006 under 37 CFR 1.312 has been considered and has been entered. The following is a corrected statement of reasons for allowance as per the amendment.

Allowable Subject Matter

2. Claims 1-40 are allowed.

3. The following is an examiner's statement of reasons for allowance: the prior art of record does not teach the claimed subject matter of claim 1; therefore, claim 1 is allowable for the reasons pointed out by Applicant's remarks (see p. 7, "Misunderstandings").

4. It follows that claims 2-19 are then inherently allowable for depending on an allowable base claim.

5. The following is an examiner's statement of reasons for allowance: claims **20-29** are allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of said prior art which teaches

6. means for interpreting measurement signals from the sensor, to correct the sensor output signals for drift due to incomplete warmup;
said interpreting means comprising processor portions for:

isolating measurement-signal segments representing the at least one **area** to establish a tonal-reference calibration level, and

applying the calibration level to correct the measurement signals due to the measured illuminated colors.

7. Takahashi (US 2003/0016263) discloses a printing apparatus and a method for performing printing registration. In addition, an optical sensor is disclosed for reading and is located in such a position to provide stability of reading. Takahashi fails to specifically address the invention as claimed.

8. Yamaguchi (6,788,431) discloses printing a patch image and generation of a correction value. Also, the image data is corrected in accordance with the correction value. Yamaguchi fail to specifically address the invention as claimed.

9. Bhattacharajya (5,809,213) discloses a method and apparatus for automatic color correction. Bhattacharajya fails to specifically address the invention as claimed.

10. The following is an examiner's statement of reasons for allowance: claims **30-39** are allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of said prior art which teaches

11. plural light-emitting diodes for scanning across the test pattern and the at least one reference area to illuminate the pattern and the at least one area, temperature dependence in the diodes leading to drift of illumination level during warmup,

a sensor for scanning across the pattern and the at least one area, with the diodes, to measure illuminated colors in the test pattern and to measure the at least one reference area, whereby the illumination drift leads to drift of measurement signals from the sensor,

an analog-to-digital converter for receiving the measurement signals, nonlinearities in the converting making measurements of small signal differences on a large signal pedestal undesirable, wherefore the diodes are used in alternation rather than continuously, and therefore never fully **complete** warmup, and

means for compensating for incomplete diode warmup;

said compensating means comprising portions of the processor for interpreting output signals from the converter, to correct the converter output signals for drift due to said incomplete warmup;

said interpreting portions comprising processor portions for:

isolating converter-signal segments representing tonal-reference calibration level, and

applying the tonal-reference calibration-level segments to correct the measurement signals due to the measured illuminated colors;

whereby the apparatus accommodates the printhead tolerances and diode temperature dependence, and avoids the converter nonlinearities.

12. Takahashi (US 2003/0016263) discloses a printing apparatus and a method for performing printing registration. In addition, a print head and a plurality of print heads are taught. Takahashi fails to specifically address the invention as claimed.

13. Yamaguchi (6,788,431) discloses printing a patch image and generation of a correction value. In addition, controlling the temperature of the heat drum is taught. Yamaguchi fail to specifically address the invention as claimed.

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14. Bhattacharajya (5,809,213) discloses a method and apparatus for automatic color correction. In addition, a lookup table with calibration values stored within. Bhattacharajya fail to specifically address the invention as claimed.

15. The following is an examiner's statement of reasons for allowance: **claim 40** is allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of said prior art which teaches

guide means establishing a spacing between such printing medium and at least a portion of the sensor; said guide means being subject to tolerances that lead to nonuniformity of the spacing, at the scan positions, means for interpreting measurement signals from the sensor, to correct the sensor output signals for variation due to said nonuniformity of the spacing; said interpreting means comprising processor portions for: also scanning the sensor across an unprinted region of the medium to obtain respective unprinted-medium tonal-reference calibration levels for the scan positions, isolating measurement-signal segments representing the tonal-reference calibration levels for the scan positions, and applying the isolated signal segments to correct the measurement signals due to the measured illuminated colors.

16. Takahashi (US 2003/0016263) discloses locating an optical sensor at a position where signal to noise **ratio** is stable with respect to fluctuations in distance from the object to be read. Takahashi fails to specifically address the invention as claimed.

17. Yamaguchi (6,788,431) discloses printing a patch image and generation of a correction value. Also, the image data is corrected in accordance with the correction value. Yamaguchi fail to specifically address the invention as claimed.

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18. Bhattacharajya (5,809,213) discloses a method and apparatus for automatic color correction. In addition, a lookup table with calibration values stored within. Bhattacharajya fail to specifically address the invention as claimed.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CMB


KIMBERLY WILLIAMS
SUPERVISOR, PATENT EXAMINER

Response to Rule 312 Communication	Application No.	Applicant(s)	
	09/919,260	SOLER ET AL.	
	Examiner	Art Unit	
	Charlotte M. Baker	2626	

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1. ☒ The amendment filed on 03 January 2006 under 37 CFR 1.312 has been considered, and has been:

a) ☐ entered.

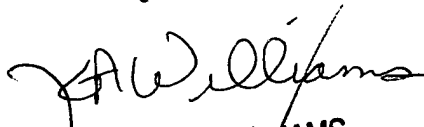
b) ☒ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.

Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☐ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER